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WHAT IS CLAIMED IS:

1. A projector comprising:

a light source;

a first optical element that condenses a light beam from said light source and divides the light beam into a plurality of intermediate light beams, the first optical element having a light emitting side;

a second optical element placed on the light-emitting side of said first optical element that converts said plurality of intermediate light beams into one type of polarized light beams and superimposing the polarized light beams on a reflection-type modulation device;

only one reflection-type modulation device that modulates light emitted from said second optical element;

a polarized light beam selection element placed on an optical path between said second optical element and said reflection-type modulation device that reflects or transmits the light emitted from said second optical element to allow the emitted light to reach said reflection-type modulation device, and that transmits or reflects the light modulated by said reflection-type modulation device to allow the modulated light to reach a projection optical system; and

a collimating lens placed between said second optical element and said polarized light beam selection element.

2. The projector according to claim 1, further comprising a polarized light conversion element including:

a polarized light separation unit array in which a plurality of polarized light separation units, each having a pair of a separation surface and a reflection surface for polarized light, are aligned; and

a selective phase film in which $\lambda/2$ phase layers are regularly formed.

3. The projector according to claim 2, further comprising a light-shielding plate array that prevents the intermediate light beams from directly entering portions of the reflection surfaces placed on an incident side of the polarized light separation unit array.

4. The projector according to claim 1, the one type of polarized light beams emitted from the second optical element being a p-polarized light beam type with respect to the polarized light beam selection element.

5. The projector according to claim 1, further comprising a polarizer provided on an optical path between the polarized light beam selection element and the projection optical system.

6. A projector comprising:

a light source;
a first optical element that condenses a light beam from the light source and divides the light beam into a plurality of intermediate light beams, the first optical element having a light-emitting side;

a second optical element placed on the light-emitting side of the first optical element that converts the plurality of intermediate light beams into one type of polarized light beams and superimposing the polarized light beams a reflection-type modulation device;

three reflection-type modulation devices that modulate color light of three colors;

an optical color-light-separating-and-synthesizing system that separates a light beam emitted from the second optical element into color light of three colors, and synthesizes each color light modulated by the three reflection-type modulation devices;

a polarized light beam selection element placed on an optical path between the second optical element and the optical color-light-separating-and-synthesizing system that reflects or transmits the light emitted from the second optical element to allow the emitted light to reach the optical color-light-separating-and-synthesizing system, and transmits or reflects light

synthesized by the optical color-light-separating-and-synthesizing system to allow the light to reach a projection optical system; and

a collimating lens placed between the second optical element and the polarized light beam selection element.

7. The projector according to claim 6, further comprising a polarized light conversion element including:

a polarized light separation unit array in which a plurality of polarized light separation units, each having a pair of a separation surface and a reflection surface for polarized light, are aligned; and

a selective phase film in which $\lambda/2$ phase layers are regularly formed.

8. The projector according to claim 7, further comprising a light-shielding plate array that prevents the intermediate light beams from directly entering the portions of the reflection surfaces placed on an incident side of the polarized light separation unit array.

9. The projector according to claim 6, the one type of polarized light beams emitted from the second optical element being a p-polarized light beam type with respect to the polarized light beam selection element.

10. The projector according to claim 6, further comprising a polarizer provided on an optical path between the polarized light beam selection element and the projection optical system.

11. The projector according to claim 6, the optical color-light-separating-and-synthesizing system including two dichroic prisms.

12. The projector according to claim 6, the optical color-light-separating-and-synthesizing system including one cross-dichroic prism.

13. The projector according to claim 6, the optical color-light-separating-and-synthesizing system including a wedge-shaped dichroic prism.

14. A projector comprising:

a light source;

a first optical element that condenses a light beam from the light source and divides the light beam into a plurality of intermediate light beams, the first optical element having a light-emitting side;

a second optical element placed on the light-emitting side of the first optical element that converts the plurality of intermediate light beams into one type of polarized light beams and superimposing the polarized light beams on a modulation device;

an optical color-light-separating system that separates a light beam emitted from the second optical element into color light of three colors;

three modulation devices that modulate each of the color light separated by the optical color-light-separating system;

an optical color-light-synthesizing system that synthesizes the color light modulated by the three modulation devices;

three polarized light beam selection elements placed on an optical path between the optical color-light-separating system and the optical color-light-synthesizing system that reflects or transmits the light emitted from the optical color-light-separating system to allow the emitted light to reach each of the three modulation devices, and that transmits or reflects the light modulated by the three modulation devices to allow the modulated light to reach the optical color-light-synthesizing system; and

three collimating lenses, each placed between the optical color light-separating system and a polarized light beam selection element.

15. The projector according to claim 14, further comprising a polarized light conversion element including:

a polarized light separation unit array in which a plurality of polarized light separation units, each having a pair of a separation surface and a reflection surface for polarized light, are aligned; and

a selective phase film in which $\lambda/2$ phase layers are regularly formed.

16. The projector according to claim 15, further comprising a light-shielding plate array that prevents the intermediate light beams from directly entering portions of the reflection surfaces placed on an incident side of the polarized light separation unit array.

17. The projector according to claim 14, the one type of polarized light beams emitted from the second optical element being a p-polarized light beam type with respect to at least one polarized light beam selection element.

18. The projector according to claim 14, further comprising a polarizer provided on an optical path between at least one polarized light beam selection element and a projection optical system.